Die Synthese von 2-Methyl-5-phenacyl-1,3,4-thiadiazolen

The Synthesis of 2-Methyl-5-phenacyl-1,3,4-thiadiazoles

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2,5-Dimethyl-1,3,4-thiadiazole (**1a**) reacts which aromatic carboxylic acid esters **8a** – **u** in the presence of excessive sodium hydride under condensation to give sodium enolates which afford on hydrolysis the phenacyl-1,3,4-thiadiazoles **9a** – **u**. The action of aromatic carboxylic acid chlorides on **1a** in the presence of triethylamine gives rise to the formation of mixtures of diacylated thiadiazole derivatives **16** and **18**. In some cases the pure 3-acyl-phenacylidene-2,3-dihydro-1,3,4-thiadiazoles **16** can be isolated. Generally the compounds **16** are rearranged on heating in higher boiling solvents to give the enolbenzoates **18**. Hydrolysis of the diacylated thiadiazoles **16** and **18** yields the phenacyl-thiadiazoles **9a**, **c**, **d**, **g** – **j**, **v**, **w**.

Key words: Acylation, Aromatic Carboxylic Acid Esters and Chlorides, Phenacyl-1,3,4-thiadiazoles